

REMARKS

In the Office Action dated May 18, 2004, claims 1-4, 16, 17, 32 and 34-37 were rejected under 35 U.S.C. §103(a) as being unpatentable over Matsushita et al. in view of Storch et al. Claims 5-9 and 33 were rejected under 35 U.S.C. §103(a) as being unpatentable over Matsushita et al. and Storch et al., further in view of Brookner. Applicants note with appreciation the interview courteously afforded the undersigned counsel for the Applicants on July 15, 2004, wherein the above rejections were discussed, the above amendments were proposed and discussed, and the following arguments in support of patentability were presented.

As discussed at the interview, the method and arrangement disclosed and claimed in the present application are not only for the purpose of preventing the unauthorized use of a depleted consumable in a device (i.e. preventing the use of a pirated replacement consumable), but also are for the purpose of monitoring usage of the device with respect to that consumable. For this purpose, each replacement consumable item is provided with a reference code word, and a range (plurality) of these reference code words are stored in the device. When it becomes necessary to replace a depleted consumable, two actions are taken at the device. First, the reference code word associated with the replacement consumable is checked at the device against the list of stored reference code words, and a match to one of the stored reference code words must be found in order to permit the device to be used with the replacement consumable. This can be considered as the "authorization" portion of the procedure that is implemented.

Additionally, the stored reference code word that was found to be a match for the reference code word of the replacement consumable is "consumed" from the

memory. As discussed below, the meaning and scope of "consumed" has been a subject of discussion in the previous Office Actions, and therefore each of the independent claims has been amended to define "consumed" as meaning that the matched reference code word is stricken from the device (or memory). Claim 34 already included that limitation. If the reference code number were not precluded from further use in this manner, it would be possible for a company making pirated replacement consumables to exactly copy an authentic replacement consumable, including its reference code number, and then to repeatedly reuse such multiple copies of this pirated product. The same reference code number would then be matched over and over again in the memory of the device, but the device would have no reason to "suspect" that any piracy was occurring, because a legitimate match of the reference code numbers would always occur.

In the method and arrangement of the present invention, however, because, after a match occurs, the stored reference code number is consumed, this absolutely requires that the next time a need for a replacement consumable occurs, the replacement consumable must have another reference code number that must match one of the remaining reference code numbers stored in the device. This means that if a company wants to attempt piracy, it must produce a series of pirated replacement consumables with each one having a proper reference code number, since the same reference code number cannot be used again and again. This makes such piracy much more difficult.

Moreover, as set forth in certain of the dependent claims, the fact that the list of reference code numbers stored in the device is limited provides a means for monitoring proper usage of the device. The reference code list must be obtained

from a remote center (data center), and when the list has been completely consumed after a certain number of replacement consumables have been used, the owner of the device must communicate again with the data center to obtain a new list. In the case of a postage meter, which is a preferred use of the inventive method and arrangement, the owner of the postage meter must also periodically communicate with the data center to obtain a credit for reloading franking funds into the postage meter. By knowing how frequently the owner of the postage meter requests replacement funds, the data center has information from which the degree of usage of the device can be reliably ascertained. If the owner of the postage meter is seeking a new list of reference code numbers for a particular consumable that does not track the usage represented by the replacement funds (i.e. asking for replacement funds once a month but asking for a replacement list of reference numbers every week), the data center has a way of designating the device as being used in a suspicious manner, that may involve piracy.

None of the references relied upon by the Examiner, and in particular the Matsushita et al. reference, provides teachings wherein matching of a stored reference number or reference code word, by a reference code number associated with a replacement consumable, results in the matched reference code number being consumed from a memory. In the Matsushita et al reference, as explained in detail at pages 16-20 of Applicants' previous response, the Matsushita et al. device does not "consume" a matched reference number in the sense of striking it from the contents of the list stored in the memory. The Matsushita et al reference operates in the opposite manner. Each time a replacement product is to be installed in the apparatus in Matsushita et al., its identification number is *added* to the contents of

the RAM 204. If another replacement consumable is attempted to be used having the same identification number (or at least the same last two digits), the use thereof will be prevented because of the list that is accumulated in the RAM 204. As described above, this is opposite to the method and arrangement of the present invention, wherein, when a replacement consumable is authenticated, the code number associated therewith is consumed by striking it from the memory. Moreover, the advantage of allowing usage monitoring that is achieved by the method and apparatus of the present invention cannot be achieved in the Matsushita et al reference, because by simply adding a reference number to the contents of the memory 204, the total list of numbers in the memory (nor in any other memory) is not decremented or depleted. The user of the apparatus in Matsushita et al., therefore, does not need to periodically obtain a new list of authentication numbers, as is the case in the method and apparatus of the present invention because of the striking of the reference numbers from the memory.

Claim 34 already included the definition of "consuming" as being "striking said one of said reference code numbers from the reference code number range stored in said device," and therefore the inclusion of this limitation in the other claims does not raise a new issue requiring further searching or consideration. In considering claim 34, the Examiner already had to give consideration to this limitation. Entry of the present Amendment after the final rejection is therefore proper, and the same is respectfully requested.

For the above reasons, the Matsushita et al. reference does not disclose a method or an arrangement as operating in the independent claims, and modifying the Matsushita et al reference in view of the teachings of Storch et al. would not alter

this conclusion. The Storch et al. reference does not provide any guidance in the form of a teaching, motivation or inducement to modify the Matsushita et al reference to strike a matched reference code number from the memory. In fact, such a modification of the Matsushita et al reference would destroy its intended operation, because its intended operation is dependent on a matched referenced code number (or at least the last two digits thereof) being *added* to the RAM 204, instead of striking the matched number from a memory.

The same is true with regard to the teachings of the Brookner reference. Therefore, even if the Matsushita et al reference were modified in accordance with the teachings of Storch et al. and/or Brookner, the subject matter of the claims of the present application still would not result.

All claims of the application are therefore submitted to be in condition for allowance, and early reconsideration of the application is respectfully requested.

Submitted by,

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